

Are You A Yucca?
Classroom Program
Ranger Version
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Grade: Kindergarten and first grade

Subject: Plants of the Mojave Desert

Theme: The harsh conditions of the desert produce plants that have adapted in a number of ways to survive.

Goal: Students will have a better understanding of desert plants.

Objectives: Students will be able to name and describe three desert plant species.
Students will compare and contrast three desert plant species.

Curriculum Objectives: Earth and Space Science

- (1) 2.1 Observe, compare, and describe attributes of plants.
- (1) 2.5 Sort plants by observable characteristics.

Background: Harsh desert conditions such as high temperatures, scarcity of water, constant winds, and lack of soil nutrients have forced plants to adapt to these conditions. Each plant has special adaptations and each fills an important niche in the desert ecosystem.

By studying plants a variety of adaptations can be seen. Small leaves that help reduce the amount of surface area that is exposed to the intense sunlight, light colored leaves that reflect the rays of the sun, modified leaves that are called spines, expandable stems for storing water, are some of the changes plants have undergone to continue to survive in the Mojave desert.

Key Points: A botanist is a scientist who studies plants.
A desert is a harsh environment for a plant.
Observing the size, shape, colors, smells, textures are important when identifying plants.
Plants that live in the desert have many different adaptations. These characteristics help them survive in the desert.
The parts of a plant - stem, leaves or spines, roots, all play important parts in the survival of the plant.
Plant seeds are different sizes and colors.
Some plants need more water than other plants.
Outside coverings protect many desert plants.
Plant parts help prevent water evaporation.

Vocabulary: Desert - an area of land that is hot, dry, and gets very little water.
Botanist - a scientist that studies plants.
Adaptation - a physical change of a plant that helps it survive in its habitat.

Activity:

What is a botanist? Short discussion about what this scientist does and the role they play in the study of plants. They name plants, record the conditions plants grow

Activity

Have each child take off one shoe and put in pile on floor. If too many children then just choose a couple of shoes. Have children explain how they can tell what a shoe is. Discuss similarities between shoes/styles and their differences. Equate the diversity of shoes with the diversity of plants.

Activity

Divide class into groups and have them describe the plants they see in front of them. Description should include information on color, texture of stem and spine. Then rotate plants so they can observe differences between plants.

Activity:

Draw a picture of each plant

Conclusion: Plants adapt in different ways to the harsh environment of the Mojave Desert.

Presite Activity: Look at the plants in the schoolyard. Describe these plants.

Postsite Activity: Compare schoolyard plants to desert plants.